

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1 1. (Original) A data processor comprising n-bit
2 instructions and 2n-bit instructions in an instruction set
3 and including an instruction control unit that can decide
4 whether registers specified in register specification
5 fields of the instructions conflict between the
6 instructions,

7 wherein the 2n-bit instructions including register
8 specification fields include the register specification
9 fields in the first half n bits thereof, and

10 wherein the register specification fields in the first
11 half n bits have the same placement as register
12 specification fields in the n-bit instructions.

1 2. (Original) A data processor comprising n-bit
2 instructions and 2n-bit instructions in an instruction set
3 and including an instruction control unit that can decide
4 whether registers specified in register specification

5 fields of the instructions conflict between the
6 instructions,

7 wherein the $2n$ -bit instructions including register
8 specification fields include the register specification
9 fields in one of the first half n bits or latter half n
10 bits thereof, and

11 wherein the register specification fields in the first
12 half n bits or latter half n bits include the same
13 placement as register specification fields in the n -bit
14 instructions.

1 3. (Original) The data processor according to claim
2 2,

3 wherein the instruction set comprises instructions in
4 which register specification fields aligned with the
5 register specification fields in the n -bit instructions are
6 placed in the first half n bits of the $2n$ -bit instructions,
7 and

8 wherein the instruction set further comprises
9 instructions in which register specification fields aligned
10 with the register specification fields in the n -bit
11 instructions are placed in the latter half n bits of the
12 $2n$ -bit instructions.

1 4. (Original) The data processor according to claim
2 1,
3 wherein n bits are 16 bits, and 2n bits are 32 bits.

1 5. (Original) The data processor according to claim
2 1,
3 wherein the instruction control unit, in response to
4 register conflict, is able to perform control such as the
5 stalling of pipeline stages or the forwarding of operation
6 data write to general purpose registers.

1 6. (Original) The data processor according to claim
2 1,
3 wherein the data processor is able to execute
4 instructions in single scalar mode.

1 7. (Currently amended) The data processor according
2 to ~~one of claims~~claim 1 to 3,
3 wherein the data processor can execute instructions in
4 superscalar mode.

1 8. (Original) The data processor according to claim
2 2,

3 wherein the instruction control unit, in response to
4 register conflict, is able to perform control such as the
5 stalling of pipeline stages or the forwarding of operation
6 data write to general purpose registers.

1 9. (Original) A data processor comprising first n-
2 bit instructions and second 2n-bit instructions each
3 including register specification fields in an instruction
4 set,

5 wherein the second instructions are instructions with
6 an immediate value or displacement value extended to the
7 first instructions,

8 wherein the second instructions include register
9 specification fields in the first half n bits thereof, and

10 wherein the register specification fields in the first
11 half n bits of the second instruction comprises the same
12 placement as the register specification fields in the first
13 instructions.

1 10. (Currently amended) The data processor according
2 to claim 9,

3 wherein the data processor includes third n-bit
4 instructions including register specification fields,
5 wherein the third instructions and the second
6 instructions are different from each other in the number of
7 operands specifiable in the register specification fields,
8 and and

9 wherein register specification fields of the third
10 instructions and those of the second instructions are
11 aligned in the start of the register specification fields
12 with respect to the start of the first instructions.

1 11. (Original) A data processor comprising first n-
2 bit instructions and second 2n-bit instructions each
3 including register specification fields in an instruction
4 set,

5 wherein the second instructions include register
6 specification fields in one of the first half n bits and
7 the latter half n bits thereof, and

8 wherein the placement of the register specification
9 fields in the first half n bits or the latter half n bits

10 is the same as the placement of the register specification
11 fields in the first instructions.

1 12. (Original) The data processor according to claim
2 11,

3 wherein the data processor includes third n-bit
4 instructions including register specification fields,
5 wherein the third instructions and the second
6 instructions are different from each other in the number of
7 operands specifiable in the register specification fields,
8 and

9 wherein register specification fields of the third
10 instructions and those of the second instructions are
11 aligned in the start of the register specification fields
12 with respect to the start of the first instructions.

1 13. (New) The data processor according to Claim 2,
2 wherein the data processor can execute instructions in
3 superscalar mode.

1 14. (New) The data processor according to claim 3,
2 wherein the data processor can execute instructions in
3 superscalar mode.